Before the FEDERAL COMMUNICATIONS COMMISSION Washington, DC 20554

In the Matter of)	
)	
Technology Transitions Policy)	GN Docket No. 13-5
Task Force Seeks Comment on)	
Potential Trials)	

COMMENTS OF SPRINT CORPORATION

Sprint Corporation ("Sprint") hereby respectfully submits its comments in the above-captioned docket on AT&T's proposed experiment on the TDM-to-IP transition.¹ AT&T's experiment may be a helpful tool for AT&T to plot its strategy for its internal TDM-to-IP conversion and identify the effect on consumer products. Sprint, as it has said previously, is eager to exchange traffic in IP format with all carriers and recognizes the benefits of this conversion for consumers.² But AT&T's experiment should not further delay wholesale and intercarrier voice IP interconnection, which is a necessary prerequisite to the achievement of these consumer benefits. The conversion of the core network is languishing not for technical reasons, but rather because certain carriers are hesitant to enter into IP traffic exchange agreements for regulatory ends and despite the Commission's admonition that the interconnection obligations under sections 251 and 252 of the 1996 Act are "technology neutral."

¹ AT&T Proposal for Wire Center Trials, GN Docket Nos. 13-5, 12-353 (filed Feb. 27, 2014) ("Proposal"); *Commission Seeks Comment on AT&T's Proposal for Service-Based Technology Transitions Experiments*, Public Notice, DA 14-285 (rel. Feb. 27, 2014).

² Comments of Sprint Nextel Corporation, GN Docket No. 13-5 (filed July 8, 2013).

I. AT&T'S PROPOSAL IS USEFUL TO LEARN ABOUT RETAIL MARKETS FOR TDM RETIREMENT BUT SHOULD NOT HINDER IMMEDIATE WHOLESALE AND INTERCARRIER IP INTERCONNECTION

The industry recognizes the long-term benefits to consumers from the TDM-to-IP transition because of the potential to provide cheaper and more varied services. The speed of the transition is being hampered not so much by technological hurdles, but rather by financial ones. The Commission, in its request for trials, attempted to put the regulatory and financial issues to the side,³ but legacy rate structures and incentives are not easily divorced from the need to continue to update the nation's communications networks.

A. Nationwide IP Voice Platform Must Be Ready Before Retail Services are Retired

AT&T is eager to retire its TDM network, seeking to accomplish the goal by 2020.⁴ But AT&T's proposed experiment is putting the cart before the horse. While Sprint supports AT&T's efforts (and those of the entire industry) to transition its retail offerings to IP, many of the benefits of that transition will be lost if carriers do not first migrate their wholesale and intercarrier interconnections to IP. AT&T has proposed a long, complicated, and isolated experiment. Carriers should not have to wait for this experiment to finish before migrating their networks from TDM to IP or to interconnect in IP format with other carriers. Indeed, AT&T states that TDM retirement cannot begin in earnest until after the FCC has evaluated the results of Phase I of the trial,⁵ which will not be for several years. As many parties have already noted in the record, the IP conversion within carrier networks is happening now. Nothing in this retail experiment should delay that conversion.

 $^{^3}$ Technology Transitions, GN Docket No. 13-5, FCC 14-5 (rel. Jan. 31, 2014) ("Technology Transitions Order") ¶¶ 63, 84.

⁴ Proposal at 12.

⁵ Proposal at 10, 11.

It is not necessary to force conversion of retail and residential offerings from TDM to IP before or even simultaneously with wholesale and interconnection. Although cable companies and other providers of services that have always been IP have had to interconnect in TDM format in many circumstances due to legacy TDM networks of the interconnecting carrier, in Sprint's experience, these IP voice carriers are eager to interconnect in IP as soon as possible, both to reduce costs and to enable new services that require IP interconnection. These advantages are lost if calls are converted to TDM at any step along the way.

For example, Sprint and other carriers are beginning to deploy HD voice, a new standard that provides heightened voice clarity. For HD voice to work, however, the entire call path must be in IP because HD voice relies on the transmission of low frequency and high frequency signals that are intentionally filtered out by traditional telephone equipment to reduce bandwidth use and enable more calls to travel on an individual circuit. Similarly, services such as Presence (which alerts potential callers as to the recipient's availability even before the call is placed) require IP communication between both end points.

The retail migration from TDM to IP has been occurring for years and AT&T's proposed trial may push the migration along at a quicker pace. However, AT&T's trials will not be complete and cannot be adequately evaluated if there is not a parallel effort to also migrate carrier interconnection from TDM to IP. The argument appears to be that encouraging end users to make the transition will result in a speedier conversion of the underlying network. The opposite, however, is the manner in which a competitive market operates. Carriers should be seeking to offer new and innovative products at lower cost to draw customers to their networks—not dictating new products to consumers or creating artificial demand in order to justify capital investment. The creation of a lower-cost platform with additional features and

functionality will generate customer demand. Unfortunately, without strong FCC and state regulatory oversight, many carriers will have incentives to delay competitors from achieving these cost savings or offering these new services.

B. FCC Should Reaffirm 251/252 Apply to IP Voice Connections

Sprint's experience has shown that other carriers are willing to exchange traffic in IP format regardless of whether doing so is legally obligated so long as it is in the carrier's immediate financial best interest to do so.

ILECs have resisted voice IP interconnection because they want to preserve the competitive distortions derived from traditional revenue streams such as special access, originating access, tandem switching, and common transport traffic fees. In other words, despite the Connect America Fund Order's eventual elimination of terminating access charges, all the remaining elements of the access charge regime that the FCC has recognized as critical to reform, but has yet to address, constitute an ongoing revenue stream for ILECs (and significant burden to their competitors) that they are loathe to renounce until forced to do so.⁶

It has been almost two-and-a-half years since the Commission stated that "section 251 of the Act is one of the key provisions specifying interconnection requirements, and that its interconnection requirements are technology neutral—they do not vary based on whether one or both of the interconnecting providers is using TDM, IP, or another technology in their underlying networks." Carriers should be able to invoke the negotiation and arbitration provisions under the 1996 Act to ensure that they can interconnect in IP format with other carriers.

⁶ Connect America Fund, et al., Report and Order and Further Notice of Proposed Rulemaking ("CAF Order"), FCC 11-161, WC Docket No. 10-90, 26 FCC Rcd. 17663 (2011) ¶1297-1314 (requesting comment on bill-and-keep transition for originating access, tandem switching, and other rate elements); National Broadband Plan at 48, 143 (stating that the "FCC should ensure that special access rates, terms and conditions are just and reasonable").

⁷ *CAF Order* ¶ 1342.

II. ILEC TREATMENT OF SWITCHED ACCESS REMAINS AN OBSTACLE TO IP TRANSITION

The ILEC treatment of switched access as we transition to IP remains an important issue to be addressed in this trial. Although AT&T states that it will discontinue its "ILEC-provided TDM-based interstate and intrastate switched access services in the trial wire centers," AT&T also states that its "proposed wire center trials will have no effect on how IXCs terminate interstate interexchange or international calls to customers participating in the experiment." AT&T also states that it "does not intend to test IP-to-IP interconnection in the context of these wire center trials." AT&T's proposal does not specify whether carriers that currently exchange its IXC and wireless traffic in TDM format with AT&T's ILEC will be able to begin exchanging that traffic in IP format. AT&T and the Commission should use this experiment to clarify that all carriers will be able to exchange voice traffic in IP format with the two AT&T wire centers and that the carriers can also disconnect any existing TDM circuits to these wire centers.

The cost advantages of IP interconnection are vastly diminished if IXCs and wireless carriers are forced to maintain TDM circuits in addition to the IP circuits. Once an IP circuit is in place between two carriers for voice interconnection, any carrier that needs to convert to TDM due to its own network needs should be obligated to do so at its own expense, rather than forcing those costs and the need to maintain TDM circuits on other carriers. Indeed, the Commission already recognized this in the *Connect America Order* where it stated, "[i]f a carrier that has deployed an IP network receives a request to interconnect in IP, but, chooses to require TDM

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⁸ Proposal at 15.

⁹ Proposal (Wire Center Trial Operating Plan) at 50.

interconnection, we propose to require that the costs of the conversion from IP to TDM be borne by the carrier that elected TDM interconnection (whether direct or indirect)."10

AT&T acknowledges that a benefit of the TDM-to-IP conversion will be cost reduction as carriers "eliminate existing direct end office trunking arrangements that no longer would be necessary to reach TDM customers." These costs should not be imposed on other carriers as the trial proceeds. Rather, the onus should be on a carrier that wants to maintain the TDM circuits to bear those costs.

III. CONCLUSION

Sprint is supportive of AT&T's efforts to migrate its retail offerings away from TDM to IP so that its customers and other carriers' customers that interconnect with AT&T can enjoy the exciting new services and lower costs that will accompany the transition. But establishing ubiquitous IP voice interconnection among carriers —already mandated by the 1996 Act—is a necessary prerequisite to enable these new services, and the Commission should not wait in requiring all carriers to do what many have already done voluntarily, that is, exchange voice traffic in IP format even where it originates or terminates in TDM.

 $^{^{10}}$ CAF Order \P 1361. 11 Proposal (Wire Center Trial Operating Plan) at 48.

Respectfully submitted,

SPRINT CORPORATION

/s Keith C. Buell

Charles W. McKee Vice President, Government Affairs Federal and State Regulatory

Keith C. Buell Senior Counsel, Government Affairs Federal Regulatory

900 Seventh St. NW Suite 700 Washington, DC 20001 (703) 592-2560

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